

# Master and Broadcast Monitors 2009

## TRIMASTER Series

PSE Content Creation Product Marketing

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## TRIMASTER series

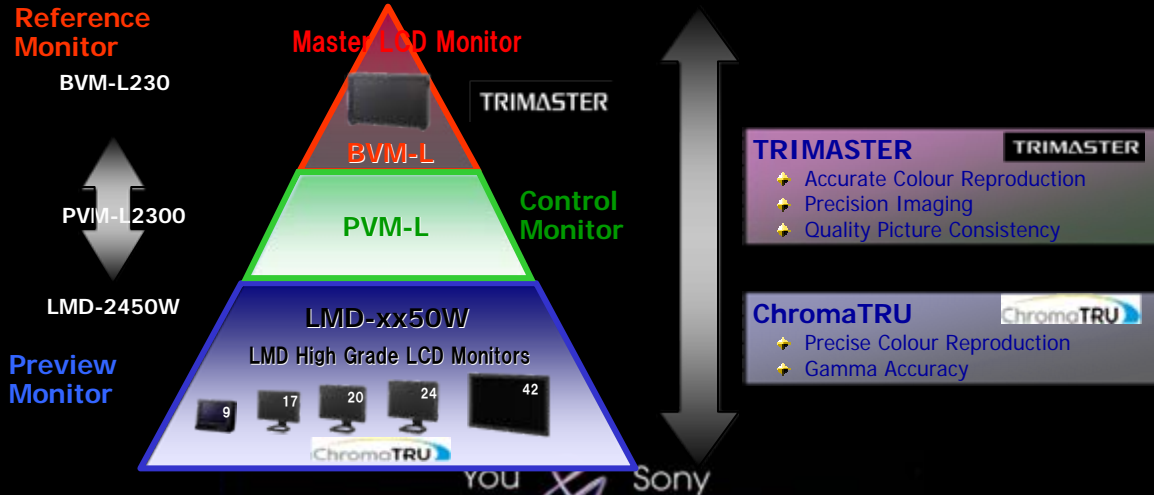
- Sony is expanding its TRIMASTER range with two new models
- BVM-L230
  - 23" Full HD Master Monitor
- BVM-L170 **New**
  - 17" Full HD Master Monitor
- PVM-L2300 **New**
  - 23" Full HD Broadcast Monitor



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# Broadcast & Professional Monitors

## Product Positioning



# Key Technologies

## Technologies



1. Precise colour reproduction and gamma accuracy with ChromaTRU technology- Similar to CRT
2. Precise signal accuracy and smooth colour gradation with 10-bit signal processing
3. High quality motion adaptive I/P conversion for improved picture performance

### Model name

- LMD-4250W
- LMD-2450W
- LMD-2050W
- LMD-1750W

### Target applications

- BC (Studio/OBVAN/Master Control Room)
- Production Company (Editing)
- Location/Hire Companies
- Videographers/Prosumers
- Institutional/Corporate/Education

## TRIMASTER

1. Accurate Colour Reproduction
  - Colour Management System
  - Wide Colour Gamut
  - Digital Uniformity
2. Precision Imaging
  - High Resolution & High Colour
  - High Motion Picture Processing
  - Accurate Pixel Mapping
3. Quality Picture Consistency
  - Accurate Signal Processing
  - Precise Calibration System
  - Colour Feedback System

### Model name

- BVM-L230
- BVM-L170
- PVM-L2300

### Target applications

- BC (Studio/OBVAN/Master Control Room)
- Production Company (Editing)
- High-end Post Production & Cinema applications

# Defining a Master Monitor



**High Performance, Accuracy, Consistency, Stability** are essential

# New Trademark “TRIMASTER”

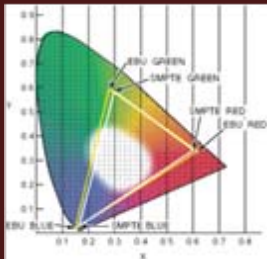
**TRIMASTER** is the Mastering Technology, which ensure three key element for professional Monitors, as **accurate colour** reproduction, **Precision Imaging** and Quality **Picture Consistency**.



# BVM-L Master Monitor



## Accurate Colour Reproduction



✓ Emulates BC standards, ITU-R BT.709, EBU, SMPTE-C and even D-Cinema

- High purity LED backlight (Precision Backlight System)
- Color management system (nonlinear cubic conversion)

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# BVM-L Master Monitor

## Precision Imaging



- ☑ Offers “pixel-to-pixel” and high contrast precision digital HD images
  - Full HD (1,920 x 1,080) HD resolution
  - RGB 10 bit panel driver



- ☑ Superb Motion picture response
  - High Frame Rate (120fps)
  - Black Frame Insertion

- ☑ Interlace mode

120fps

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# BVM-L Master Monitor

## Quality Picture Consistency

### ☑ Ensures Quality Picture Consistency

- A signal-process featuring 12-bit output accuracy
- Precise panel calibration
- Colour feedback system

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# Key Devices for TRIMASTER

In order to ensure **"Accurate colour"** , **"Precision Imaging"** and **"Quality Picture Consistency"** to the master monitor grade, Sony developed new key devices exclusive for TRIMASTER Series.

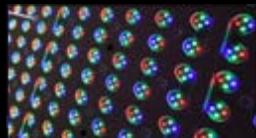
## 1. Customized LCD Panel

- ❑ Full HD Resolution
- ❑ RGB 10 bit driver
- ❑ High Frame Rate (96/100/120Hz)



## 2. Precision Backlight System (for BVM)

- ❑ Colour Temp can be adjusted by backlight
- ❑ Wide colour Space by High-purity LED
- ❑ Uniformity Control and Stabilization



## 3. New Display Engine

- ❑ 12 bit accuracy
- ❑ New I/P Algorithm with less process delay
- ❑ New colour Management System



# BVM-L230 Master Monitor

- First Reference 23-inch Full HD Master monitor on the market
- Superior SD and HD picture performance with low video delay
- Ultimate accuracy in colour and picture uniformity
- Extended colour gamut for Cinema applications
- S-Log gamma for CineAlta camera
- Enhanced production features
  - Picture & Picture various display mode
  - HD frame capture on memory stick
  - Pixel zoom
  - Gamut error
- No picture distortion and less adjustments required.
- Target applications
  - High-end post production
  - Colour grading
  - Program/Preview
  - Engineering
  - Reference image control

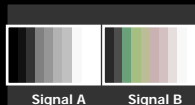


Over 600 units sold world wide!

# New Functions

## Picture & Picture Display mode

Ability to display various modes picture side by side



Side by Side



Wipe



Butterfly



Blending

## Pixel Zoom

Mode available in native scan mode



## HD Frame capture

Full HD capture on memory stick!

Magnified up to 800% without scaling

# BVM-L170 Product Outline **New**

## Product Concept

- 17"W LCD Master Monitor
- Successor of the well known BVM-A20/A14 series
- Rack mountable
- Outdoor operation

## Product Outline

- 17" Full HD (1920x1080) 10 bit LCD panel
- TRIMASTER monitor with LED Precision backlight control and Sony Professional Display Engine
- 19" rack mountable (6U Height), DC operation available
- Other features are consistent to BVM-L230

Introduction: Available now!



# PVM-L2300 Product Outline **New**

- Product Outline
  - TRIMASTER technology concept is inherited
    - ~ Professional Display Engine with 12 bit output accuracy
    - ~ Accurate colour reproduction by wide CCFL backlight
    - ~ Low latency High Quality I/P conversion
  - Relaxed specification aimed for Broadcast applications
    - ~ 23" 1920 x 1200 10bit LCD Panel
  - Many functions compatible with BVM-L series
- Introduction: Available now!



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## PVM-L2300 features difference v.s. BVM-L230

- Wider tolerances than BVM-L Master monitor
- Less accuracy in picture uniformity
- Optimised for Broadcast colour gamut
- Less picture consistency and stability
- No Cinema features
  - (D-Cine, S-Log gamma, Film aspect, Film cadence)
- Limited Picture & Picture Display mode
  - Side by side mode only (no Wipe, Butterfly, Blending)
- No Gamut error detection
- No LUT's



## TRIMASTER Series - Customer benefits

- **Ultimate LCD picture performance**
  - Full HD resolution, precision backlight, 10bits LCD drivers, Sony display engine
- **Accurate colour performance**
  - CMS, precise calibration system, colour feedback system, 12 bits output signal processing
- **Enhanced user operation with wide choice of Colour Gamut**
  - EBU, SMPTE, ITU-709, D-Cine
- **Enhanced SD picture quality and low latency video delay**
  - Display engine power
- **Maintenance efficiency**
  - No influence of terrestrial magnetic field
  - No picture distortion (geometry, focus, convergence and linearity)
- **Enhanced Multi-format capability**
  - 1080/50p , D-Cinema and PC format
- **New added features**
  - Picture & picture displays, Pixel zoom, HD Frame capture, etc.





**More information is available on:**  
**[www.Sonybiz.net/Monitors](http://www.Sonybiz.net/Monitors)**